

REMARKS

This amendment is submitted in response to the Official Action of November 5, 2008, in which claims 1, 3, 5-9, 12-26 and 29-39 have been rejected, and claims 2, 4, 10, 11 and 27 have been objected to.

With respect to the first exemplary concept of the present invention, the following amendments have been made:

Claim 2 has been cancelled, and its limitations have been included in independent claims 1, 29, 31 and 32.

All independent claims were revised to more clearly express to which entity they relate.

Dependent claim 4 was also cancelled.

Dependent method claims 5-11 were transformed into dependent claims for a first communication unit.

With respect to the second exemplary concept of the present invention, the following amendments have been made:

Claim 25 was cancelled and its limitations were included into independent claims 12 and 33-35. All independent claims were revised to more clearly express to which entity they relate.

Dependent claim was also cancelled.

Dependent method claims 16-24 were transformed into dependent claims for a third communication unit.

With respect to the third exemplary concept of the present invention, the following amendments have been made:

Independent claims 26, 30 and 36-37 were revised to more clearly express to which entity they relate.

Dependent method claim 27 was transformed into a dependent claim for a first communication unit.

In all independent claims, amendments were made to express that a first communication unit can be associated with at least one second communication unit, and

that a second communication unit can be associated with at least one third communication unit.

Subject Matter of the Amended Independent Claims

The present invention relates to negotiation and re-negotiation of protocol parameters in the context of handovers in mobile communications systems. Applicant respectfully submits that the invention includes several novel and non-obvious elements, including but not limited to the following:

A first exemplary concept, covered by independent claims 1, 29, 31, 32 and by dependent claims 5-11 and 28, is related to the case where a handover of a mobile station from a first MSC (Mobile Services Switching Center, e.g., a UMTS-MSC) to a second MSC (e.g., a GSM-MSC) occurs, and proposes a negotiation of a protocol parameter (as for instance, a resequencing timer) to then be started by said mobile station. Therein, the mobile station checks whether the protocol parameter is required for the operation of a protocol between the mobile station and the second MSC, and whether the parameter needs to be negotiated or renegotiated and only starts the negotiation if both checks are positive.

A second exemplary concept, covered by independent claims 12, 33, 34 and 35, and by dependent claims 15-25 and 38, is related to the case where a handover of a mobile station from a first BTS (base transceiver station) that is connected to its MSC via a specific I(e.g., IP-based) network to a second BTS that is connected to its MSC via a different (e.g., a TDM-based) network, and proposes a negotiation of protocol parameters (such as an acknowledgement timer or a resequencing timer), wherein the MSC associated with the second BTS transmits a negotiation message with a parameter that is related to a transmission characteristic of the transmission medium between the second BTS and its associated MSC to the mobile station, wherein the transmission characteristic is related to a transmission delay, and wherein the MSC associated with the second BTS can determine a value for this parameter for each BTS it can be associated with.

A third exemplary concept is covered by independent claims 26, 30, 36 and 37 and by dependent claims 27 and 39, and is related to the case where a handover of a mobile station from a first MSC (e.g., a UMTS-MSC) to a second MSC (e.g., a GSM-

MSC) may be possible at a later time. It is proposed that negotiation of a protocol parameter, for instance, a resequencing timer, is performed between the mobile station and the first MSC prior to the potential handover.

Novelty and non-obviousness of the amended independent claims

Since claim 2, which has been included into all independent claims 1, 29, 31 and 32 of the first exemplary concept of the present invention, has been considered allowable in the last office actions, applicant refrains from presenting a detailed argumentation towards novelty and non-obviousness of these independent claims, but reserves the right to do so if required.

With respect to the second exemplary concept, the feature of claim 25 has been included into all independent claims 12, 33, 34 and 35. In the last office action, claim 25 was considered to be rendered obvious by a combination of WO '881 and WO '888. This view is respectfully traversed.

The feature of claim 25 requires that the transmission characteristic is related to a transmission delay, which is not the case in WO '881. Furthermore, WO '881 fails to disclose that the value for the parameter can be determined by the third communication unit for each of the second communication units it can be associated with.

Now, while the maximum value $T1_{max}$ for the timer T1 disclosed in WO '888 may be considered as a value of a parameter that is related to a transmission delay of a transmission medium, WO '888 still completely fails to disclose that such a value for a parameter can be determined by the MSC 6 (the third communication unit) of WO '888 for each BTS2 (second communication unit) it can be associated with.

The wording of the independent claims of the second exemplary concept reads that "said value for said parameter depends on a transmission characteristic of a transmission medium between said new second communication [BTS2] and its associated third communication unit [MSC6]" and "can be determined by said communication unit [MSC6] for each of the second communication units [BTS2] it can be associated with". This clearly requires that the value for said parameter used in the negotiation message exchanged between the MSC 6 and the MS 1 has to depend on the transmission characteristic (related to the transmission delay) of the transmission medium between

MSC 6 and BTS 2. It is thus not possible to map a default value for T1max used by MSC 6 to the “value” of the claim language.

It is out of the question that the MSC 6 of WO '888 is not capable of determining values for T1max adaptively for different BTSs 2 (see, for instance, the last paragraph on page 2 of WO '888, where the use of a default value is preferred). In WO '888 thus the XOD proxy is installed between BTS 2 and MSC 6 to sniff negotiations messages and prevent that default T1max value lead to deteriorated system performance in case of high-delay links.

However, even this XID proxy cannot be considered as a unit that is capable of determining a “value for the parameter” (the value T1max) for different BTSs that can be associated the MSC 6.

First, this is due to the reason that WO '888 does not target handover scenarios at all. We '888 sets out from a scenario where the BTS 2 and the MSC 6 stay always the same. It is thus sufficient that the XID proxy is fed with a value for T1max by the network or its operation once (see the last paragraph of page 10 of WO '888). This is absolutely sufficient for the XID proxy's task of sniffing negotiation messages.

Second, the XID proxy of WO '888 cannot (actively) determine T1max values for different BTSs (for instance, by consulting a look-up table with different values of different BTSs), but is dependent on input from the network or its operator.

In summary, WO '888 thus entirely fails to disclose a unit that is capable of determining a value for a parameter that depends on a transmission characteristic (related to transmission delay) of a transmission medium between a new second communication unit and its associated third communication unit for each of the second communication units the third communication can be associated with, so that, even when combining WO '881 and WO '888, a person skilled in the art does not arrive at the subject matter of the amended independent claims of the second exemplary concept of the present invention.

Finally, with respect to the third exemplary concept of the present invention, it is respectfully noted that the argumentation provided in applicant's motion of October 10, 2007, on pages 19-20, showing that WO '881 fails to disclose a parameter negotiation between the first communication unit and the third communication unit of the first type prior to the change of associations, has so far not been discussed by the Examiner at all in

the office actions that preceded the motion of October 10, 2007, so that applicant is not aware if applicant's understanding of WO '881 is considered erroneous by the Examiner or if applicant's arguments have not been considered by the Examiner at all.

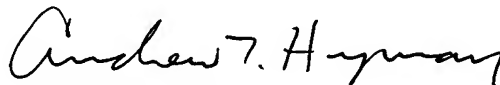
Clarification in this respect is kindly requested. In this respect, the Examiner is additionally directed to the abstract of WO '881, which also clearly states that default values are used and only modified after handover.

Without proof to the contrary, the independent claims directed to the third exemplary concept of the present invention are thus believed to be novel and non-obvious with respect to the cited prior art.

In addition, claim 1 is objected to because of a typographical error. This error has been corrected.

The objections and rejections of the Official Action of November 5, 2008, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is respectfully requested, and passage of the claims to issue is earnestly solicited.

Respectfully submitted,



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